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Rich Picture Analysis of MRT Jakarta Transit-Oriented Development (TOD) Business Ecosystem

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ABSTRACT

Transit-oriented development (TOD) aims to create added value by optimizing regions around transportation hubs. It emphasizes the integration of mass transit systems with non-motorized transport while reducing the use of motor vehicles through the development of dense, mixed-use areas. This research **examines the role of MRT Jakarta Co.** in building a business ecosystem that supports TOD area creation. The objective is to identify key stakeholders and strategies that influence TOD implementation. This research uses Soft System Methodology (SSM), with data collected from seven MRT Jakarta Co. employees and expert interviews. Rich Picture analysis is used to visualize the interactions and challenges in the system. **The results** show that collaboration among MRT Jakarta Co., developers, government, associations, and landowners is essential. Barriers include regulatory limitations, inconsistent policies, and funding constraints. The Rich Picture reveals a complex structure of roles, norms, and power dynamics that shape TOD success. **The research concludes** that regulatory support, stakeholder engagement, and clear coordination mechanisms are critical for effective TOD development. These findings can guide policymakers and urban planners in enhancing transit-based city planning.

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1. INTRODUCTION

One solution to the congestion problem is encouraging people to use public transportation to support their mobility [1]. The availability of land in Jakarta is increasingly depleting due to uncontrolled and rapid urban growth, mainly in low-rise residential areas (covering more than 64% of the total area of Jakarta) and low-rise buildings [2]. Because of this problem, Jakarta lacks space for further development. Jakarta must change its development strategy so that it is no longer oriented towards pedestrians and public transportation rather than motorized vehicles [3]. These changes include regional planning, passenger flow, intermodal integration, and offering adequate mass transit infrastructure and city development ideas that make life easier and more comfortable for its citizens. This change in city development strategy has encouraged MRT Jakarta Co. to create TOD areas at a number of phase 1 stations in the south-north corridor [4]. Based on this regulation, TOD is a concept for developing areas in and around transit nodes to provide added value. It focuses on integrating mass public transport networks and between mass public transport networks and non-motorized modes of transport, as well as reducing the use of motorized vehicles accompanied by the development of mixed and dense areas with medium to high intensity of space use [5].

Referring to the Deed of Establishment of MRT Jakarta Co. and DKI Jakarta Provincial Regulation No. 3 of 2008 [6] concerning the Formation of Regional Owned Enterprises (BUMD) Limited Liability Company MRT Jakarta (Perseroda) as last amended in DKI Jakarta Provincial Regulation No. 9 of 2018 [7] concerning MRT Jakarta Limited regional company, the Company has three main mandates, which is

- Organizing urban public railway infrastructure which includes infrastructure construction, infrastructure operation, infrastructure maintenance, and operation.
- Operation of urban public railway facilities, which includes the construction of facilities, operation of facilities, and maintenance.
- Development and management of property or business at the station and surrounding area, as well as the depot and surrounding area.

The operation of MRT Jakarta serves as the foundation for the corporation to initiate the development and management of properties or businesses at the station, depot, and adjacent areas. The primary revenue source for MRT Jakarta Co. is ticket sales from train operations, which constitute a captive market [8, 9]. Simultaneously, non-ticket revenue generated by business growth and administration at stations and surrounding properties is an ancillary venture the organization must cultivate [10].

In prior years, business development plans have utilized a business model centered on property management at the station, depot, and adjacent areas [11]. The developed business schemes encompass advertising cooperation, which involves the provision of advertising space within the station area, station naming rights, partnerships in services for users such as payment cards and telecommunications signaling, and retail business management, including oversight of regular tenants and Micro, Small, and Medium Enterprises (SMEs) [12, 13].

Mixed function development, maximizing building density around the station, simple, direct, and intuitive transit connections, an attractive, safe, and comfortable space experience for pedestrians, social justice, reducing the impact of development on the environment, infrastructure resilience, and developing local economies that attract investment and new job opportunities are the eight foundational principles that guide the development of TOD [14]. Even if distinct principles guide its development, many obstacles must be overcome to establish TOD in Jakarta. In addition to the location, current efforts are being made to enhance the regulations to make them more perfect. This is not easy because corporations must involve various associated entities in drafting these regulations [15].

The master developer, MRT Jakarta Co., is confronted with the conditions of the TOD area, which is developed (brownfield), in the development of TOD in DKI Jakarta that is walkable, clean, inclusive, modern, and secure [16]. In other words, other regional parties can serve as supporters or impediments. When collaborating with other parties in relevant domains, MRT Jakarta Co. should consider the benchmarking conducted on the cooperation scheme between MTR Hong Kong and other parties in the development and management of TOD [17]. One of these parties may originate from the private sector or the government. Given the current state of TOD, which has developed and has a functioning system, MRT Jakarta Co. must conduct thorough planning before engaging in future coordination and collaboration with the private sector [18, 19].

In addition to collaborating with developers and landowners along the MRT route, the Jakarta Provincial Government also utilizes land and assets to promote TOD development [20]. The benefit of utilizing Jakarta assets is that land is not required. In an effort to acquire management/commercialization rights, a utilization cooperation agreement is implemented. Nevertheless, the situation is undeniable: the time necessary to acquire land management rights through the collaborative utilization of these assets is a significant issue.

The management and development of TOD can be seen from values, which can also be used as a measure of achievement [21]. The resulting value can be seen from 2 perspectives: financial and non-financial. This value perspective can be seen from the standpoint of MRT Jakarta Co. itself and the community, which are consumers/users of TOD development. The value of managing and developing TOD can be seen in Table 1.

Table 1. Value perspective in the development and management of KBT

Values	
Financial Value	***Non-financial Value***
- Income from property management and businesses around the station.	- The area around the station is more organized.
	- Provision of infrastructure to support pedestrian mobility.
	- Optimization of idle DKI Provincial Government assets.
	- Increased regional connectivity.
	- Increased interest in riding the MRT.

Reference: writer (2024)

The responsibility for the development and management of KBT cannot be solely assigned to MRT Jakarta Co. The current management model of KBT presents significant challenges for MRT Jakarta Co. in engaging developers to discuss the benefits and drawbacks of KBT development. Developers and landowners must be persuaded of the non-financial advantages, such as enhanced regional planning and improved connectivity. Additionally, they require explicit assurances from the DKI Jakarta Provincial Government regarding the KBT development policy. With explicit legal clarity and comprehensive intervention from the DKI Jakarta Provincial Government, it will be easier for MRT Jakarta Co. to foster collaboration with developers and landowners around the MRT Jakarta phase 1 station area (south-north corridor) for KBT development. This scenario highlights a critical research gap: How can MRT Jakarta Co. establish a business ecosystem that promotes the creation of a TOD area?. This research addresses this gap by developing a business ecosystem for MRT Jakarta Co. using soft system methodology.

2. LITERATURE REVIEW

2.1. System Approach

The system is a collection of objects such as people, resources, concepts, and procedures that are interconnected for a purpose [22]. A system consists of parts regularly related to each other and trying to achieve a goal in a complex environment. This understanding reflects the existence of several parts and relationships between parts, and this shows the system complexity, which includes cooperation between independent parts. Regular and organized relationships are essential. In addition, it can be seen that the system is trying to achieve its goal [23, 24]. The crucial characteristics of a system include:

- Goal achievement, goal achievement orientation will give a dynamic nature to the system, characterizing the continuous change in efforts to achieve goals.

  Unity of effort reflects a fundamental nature of the system where the overall result exceeds the sum of its parts, often called the concept of synergy.

- Openness to the environment is a source of opportunities and obstacles to development. Makes the assessment of a system relative or what is called equifinality or achieving the goals of a system does not have to be done through various methods according to the environmental challenges faced [25].

- Transformation is the process of changing input into output by the system.

- There are various types of systems, including open systems, closed systems, and systems with feedback [26]. The systems approach is an organizational analysis approach that uses system characteristics as a starting point for analysis. Thus, system management can be implemented by directing attention to various essential characteristics of the system whose changes and movements will influence the success of the system [27]. According to [28], because systems thinking always seeks integration between parts through a complete understanding, a new framework of thought is needed, which is known as a systems approach.

System identification aims to provide an overview of the system being studied in diagram form. The diagrams used are cause-and-effect circle diagrams and input-output diagrams [29, 30]. The cause-and-effect

diagram depicts the relationship between components in the regional technology development and utilization system, which is then used as a basis for modeling development [31].

3. METHODOLOGY

Business Soft Systems Methodology (SSM) is a systemic approach to understanding and solving complex social and organizational problems [32]. Peter Checkland developed this methodology in the 1970s to analyze and change complex social systems. SSM is designed to address issues that cannot be solved with approaches based on mathematical or technical models [33]. This methodology focuses more on understanding the social context and perceptions of individuals involved in the system rather than modeling it mathematically. The SSM approach consists of a series of systematic steps, including an explanation of the problem situation: Identifying the problem and understanding the social context in which it arises; building a model context; creating a conceptual model that describes the relationships between relevant elements in the system, Building a change model [34]. Design a change model that describes ways to address the identified problem.

SSM recognizes the complexity of social systems and incorporates a participatory approach to involve different stakeholders in the analysis and change process [35]. This allows for a better understanding of their perspectives and needs and for finding acceptable solutions for all parties involved. SSM has been used in various fields, including management, planning, and organizational development. This methodology can help address complex and ambiguous issues and foster stakeholder understanding and collaboration [36].

The SSM methodology is based on a seven-stage process, while this research only comprises of starting from clarifying an unstructured problem situation through designing a human activity system that is expected to help improve the situation, where the stages are as follows:

- Stage One: The situation is considered problematic; the problem contained is more appropriately called a problem situation because, generally, there is more than one problem that must be resolved, so it needs to be identified individually [37]. This stage finds unstructured problems and revealed problems, analyzed using rich pictures and problem structuring methods/techniques in looking for problem situations, with problems identified through interviews or distributing questionnaires.
- Stage Two: Problem Situation Expressed, collecting data and information by conducting observations, interviews, workshops, and discussions or FGDs, followed by formulation and presentation of the problems, which are then expressed as a rich picture.

The interview method will be carried out using a semi-structured method with leaders, relevant stakeholders, academics and experts in KBT management. The interview conducted by preparing a topic and a list of questions as a guide in the interview.

4. RESULT AND DISCUSSION

4.1. Stage One: Recognition of Situations Considered Problematic

Based on this stage, there are three stages of analysis to create a rich picture in the second stage. Every researcher can start with a series of processes, as stated by Checkland and Poulter, who suggest carrying out three stages of analysis first to understand real-world situations, namely analysis one to determine roles, social analysis, and political analysis [38]. Some of the obstacles faced are:

- Regulatory limitations.
- Lack of Involvement from Government and Industry.
- Limited financing resources.
- Ineffective Coordination and Collaboration.
- Difficulties in measuring the impact and evaluating the success of value creation.
- Inconsistent or frequently changing policies.
- Skill Limitations.

In analysis one, three parties were determined who played a very important role concerning the problematic situation being studied [39]. The three parties are:

- Parties who act as clients, namely people or groups of people who cause interventions related to the problematic situation being studied.
- Parties who act as practitioners, namely people or groups of people who carry out studies using SSM.
- Parties who act as issue owners (owners of the issue addressed), namely people or groups of people who have an interest in or are affected by the results of efforts to improve problematic situations.

At this stage, there are three stages of analysis to create a rich picture in the second stage [40]. Every researcher can start with a series of processes, as stated by Checkland and Poulter, who suggest carrying out three stages of analysis first to understand real-world situations, namely analysis one to determine roles, social analysis, and political analysis. Some of the obstacles faced are:

- Limited Resources: Implementing TOD policies related to creating infrastructure requires sufficient support from the Jakarta Government.
- Lack of developer Involvement: Some developers may not be aware of the benefits and opportunities offered by MRT Jakarta Co. or may not have access to relevant information. Socialization and a proactive approach to involving developers in decision-making are essential to overcome these obstacles.
- Ineffective coordination and collaboration between the parties involved can hinder the implementation and achievement of the objectives of the TOD area.
- Difficulties in measuring the impact and evaluating the success of TOD policies. Sometimes, the results of soft infrastructure efforts are not immediately visible or measurable, which makes evaluation complex [41].
- Inconsistent or frequently changing policies can hinder the industry investment of time and resources in TOD infrastructure development. Clear policy consistency and stability will help the industry plan and invest long-term.

4.2. Social Analysis

In this stage of the SSM process, the stage of formulating proposed action steps for improvement, refinement, and changes to the real-world situation, which will be carried out in the sixth step, is discussed to consider whether the argument is acceptable and culturally possible. Therefore, recognizing real-world situations, especially the social aspects, is very important, so analysis two concentrates on social analysis. SSM practitioners can create an increasingly comprehensive picture of real-world situations by understanding social situations. In Stage Two of Analysis, Checkland and Poulter suggested three social elements as the focus of analysis, namely the aspects of roles, norms, and values.

- Roles are social positions that mark differences between group members or organization members.
- Norms are expected behavior related to roles.
- Values are standards or criteria against which behavior appropriate to the role (behavior-in-role) is assessed.

These three social elements are closely interrelated, dynamic, constantly changing over time, and changes in the real world. In this research, several actors have roles. MRT Jakarta Co. actors act as implementers of business activities and are responsible for a business progress and decline. The next actor is the private sector or developer, whose role is to accompany and support the running of the TOD area business, help provide facilities, and develop business management. The central and Regional Governments offer various facilities to help business actors develop and become established in the business world, including making policies and regulations that support business actors. The associations that manage industry act as catalysts and drivers for landowners to develop their businesses in the TOD area.

Table 2. Analysis Two: Norms and Values of Actors

Issue Owner	Role	Norm	Values
Developer	Carrying out business activities both offline and online	Government Regulations, Cooperation Agreements and Marketplaces	Government Regulations, Cooperation Agreements and Marketplaces
MRT Co.	Assistance and development of business facilities for Industry both from financing or facilities	Government Regulations, Cooperation Agreements, Facilities	Collaboration, Professionalism, Experience and Honest
Provincial Government	Providing support and ease of licensing and marketing	Government regulations, cooperation agreements, codes of ethics	Collaboration, Integrity, Professional and Competence
Land Owner	Providing land rental development and skills in business.	Land rental	Experience and Professional
Association	As a forum for sharing information for developer	Cooperation, code of ethics	Support, Collaboration and Competence

Apart from the actors roles, each actor must uphold some norms according to their role. The norms discussed in this research include government regulations, ethics codes, business training, cooperation agreements, and consumer satisfaction. Furthermore, the values held by each actor also vary depending on the role they play. These values include ease of licensing, competence, collaboration, professionalism, integrity, and customer-friendly service. Table 2 clearly shows these values.

4.3. Political Analysis

In SSM, it is strongly believed that politics determines many things, including deciding what can and cannot be done. Analysis three focuses on researching the situation power structure and the processes that control it. According to Fitriati, triple analysis in the form of political analysis provides an overview of the power in deciding whether something happens.

In this research, MRT Jakarta Co. has the power to carry out its business activities. Furthermore, the Regional Government can issue business permits and provide TOD business areas. Private companies also have the power to determine the type of financing and facility support for TOD areas. The association has the power to determine members who will be provided with various knowledge regarding business development and networks.

Table 3. Analysis Three: The Power and Authority of Actors in Improving TOD Area

Issue Owner	Disposition of Strength	Form of Authority
MRT Co.	Carrying out business and business activities in transportation	Carry out business management and transportation business activities
Developer	Provide business development for creating TOD, either through financing or facilities	Manage assistance and types of TOD creation
Government	Has regulatory authority, ease of permits, marketing regulations and infrastructure. Authority regulations.	Providing business permits and legality of conducting business in the TOD area
Land Owner	Conduct land rent and business evaluation	Providing land rent and increasing business competence
Association	Providing direction, information for knowledge sharing and marketing access	Determine the suitability of developer that can be involved in becoming members of the association

This political analysis found several pieces of information related to policies. Based on the results of interviews with the regional government of Jakarta, regulations currently exist aimed at helping business actors by providing easy access to permits, providing opportunities for access, and facilitating capital through banks or non-profit institutions. This new policy is hoped to motivate business actors to advance their businesses and establish harmonious cooperation with private institutions regarding financing and facilities [42].

Value creation in urban development refers to the process by which a project generates benefits that go beyond mere financial returns. In the case of MRT Jakarta Co., value creation encompasses social, environmental, and economic dimensions. For example, a well-planned BRT can improve the quality of life for residents by providing access to essential services, encouraging social interaction, and promoting environmental sustainability. Therefore, the focus is not only on the profitability of transportation services but also on the broader impact that KBT can have on urban communities. Several key factors can significantly enhance value creation for MRT Jakarta Co. in the development of KBT as follows.

- Financing.

  The main private parties related to banking and other financial institutions need to collaborate with MRT Jakarta Co. by providing payment models with several schemes, including some financing alternatives:

  - Grant Scheme.

    As an alternative funding for creation activities in the idea and seed stages, it can also be through funding that is in the form of encouragement or grants. Grant funds can come from corporations, philanthropy, the government, and crowdfunding.
  - Loan Scheme.

    Loan schemes can originate from various sources, including lending institutions, partnership programs, and other commercial loans, including Non-Bank Financial Institutions.
  - Investment Scheme.

    This investment scheme consists of venture capital, which involves financing through equity participation for a certain period to develop the business of a business partner or debtor, crowdfunding equity, a concept where creative entrepreneurs offer ownership rights in the form of shares as a return for contributions made by the public, and angel investors, who are individuals or groups of people with financial power willing to provide funding injections for a new company [43, 44]. Some angel investors often join together and form their own networks to share research and strengthen their investment capital. Large capital will be able to form a large business as well.

- Stakeholder Collaboration.

  In today world, where the economic climate is increasingly deteriorating with limited resources and demand that is becoming more and more complex. Therefore, it is important for an institution to consider collaboration and strategic partnerships as a way to respond to existing challenges. Norris-Tirrell and Clay emphasize that almost all problems nowadays seem too complex to be handled individually or by organizations working alone. The benefit of collaboration among group leaders is the creation of new, more complex innovations that can solve existing difficult problems. In addition, all existing resources are utilized productively, maximizing the available capacity to meet the needs of the community, and enhancing the skills and experience for both parties [45].

- Policy.

  The development of KBT by MRT Jakarta Co. in Indonesia requires a comprehensive approach, including appropriate policies and efficient budget management. Supportive policies and adequate budget allocation are crucial to ensuring the success of these projects [46]. In this article, we will discuss the crucial policy and budget factors for MRT Jakarta Co. in creating sustainable and effective transit-oriented areas. Some of the necessary policies are:

  - Integrated Planning Policy: To create a successful transit-oriented area, policies are needed that integrate transportation planning with spatial planning. Local governments and MRT Co. must collaborate to develop plans that consider aspects of land use, transportation, and public services. This policy must include zoning that supports the development of residential and commercial facilities near MRT stations, thereby facilitating access for public transport users.

  - Regulations and Incentives for Developers: Policies that provide incentives for developers to build around MRT stations are very important. This can take the form of tax reductions, ease of permits, or support in infrastructure. Regulations that simplify the development process will attract more private investment and encourage transit-oriented development.
  - Sustainability Policy: Policies that support environmental sustainability must be an integral part of KBT development. This includes the implementation of green building standards, efficient waste management, and the use of renewable energy. Policies that promote sustainability will not only support the environment but also attract the attention of the public and businesses concerned with environmental issues.
  - Public Involvement and Transparency: Policies that encourage public involvement in the planning and development process are very important. MRT Co. must involve the community in discussions regarding their needs and expectations for transit-oriented areas. Transparency in decision-making will build public trust and increase support for the proposed projects.

- The KBT Development Budget requires significant investment in infrastructure and services.

  MRT Jakarta Co. must ensure that the budget allocation for the construction and maintenance of transportation infrastructure, such as stations, tracks, and supporting facilities, is sufficient to support long-term plans. The budget must also include costs for research and development to explore innovations that can enhance operational efficiency. To reduce dependence on a single source of funding, MRT Jakarta Co. needs to explore various funding sources, including collaboration with the private sector, government grants, and loans from financial institutions. Collaboration with private developers in BRT projects can create a mutually beneficial financing model, where the profits from infrastructure investments can be shared.

4.4. Second Stage: Expressing the Problematic Situation and Organizing Rich Picture (RP)

The business continuity model is a term used to describe the process of organizing a complex picture by developing an organized and integrated model. Generating value for regional development consistent with KBT principles, including economic regeneration, sustainability, infrastructure resilience, social equity and inclusiveness, high development density, reliable and optimal connectivity, and improved quality of life for regions and cities. The management of MRT Jakarta Co. defines value creation as enhancing investor appeal to prioritize investments, particularly in the property sector within the TOD of MRT Jakarta Co. MRT Jakarta Co. has been designated as the primary developer and operator of rail-based mass transportation by Governor Regulation No. 67 of 2019 on the Implementation of Transit-Oriented Development and Governor Regulation No. 50 of 2021 [47] on Amendments to Governor Regulation No. 67 of 2019 on the Implementation of Transit-Oriented Development.

The B2B approach is presently employed in the management and development of mutualistic TOD, which satisfies the partners economic interests while simultaneously achieving the objectives of TOD. Cooperative efforts to advance interconnected issues, such as interconnection, are implemented [48]. Approval from the BKPRD Meeting is required to provide recommendations regarding development proposals within TOD. One of the indicators used to evaluate partners and determine cooperation with the regional manager is the demand for potential passengers. It is possible to verify that the number of passengers has increased annually during the operation of the MRT North-South Line Phase 1 (with several comments throughout the COVID-19 outbreak phase). Rail-based mass transportation services have emerged as an alternative for individuals who utilize public transportation.

Enhancing KBT Utilizing the VRIO Framework A company seeking to improve Transit-Oriented Development might assess its resources and capabilities using the VRIO framework to identify potential sources of sustainable competitive advantage [49]. Utilizing the VRIO framework, resource-oriented firms such as UrbanConnect Solutions may discern and exploit their resources and competencies to establish a competitive edge in advancing Transit-Oriented Development. This strategy enhances the company profitability and fosters dynamic and sustainable communities centered on efficient transportation systems. This study corresponds with the research conducted by [21], which examines value propositions as a strategic component and a communication instrument for companies to articulate the benefits of their product offerings to the target community in the KBT sector. This denotes the primary advantages that the product or service offers to the intended customers [50].

Consequently, it may be inferred that this value creation is not associated with the company products and product attributes, but rather with the customer experience in recognizing requirements and aspirations in the development of KBT [51]. Consequently, value creation in KBT must strive to fulfill the wants and desires of target customers in a manner that is distinct and superior to competing products, ensuring genuine and sustainable distinction over time [52]. The value proposition is a concise declaration of the intangible and tangible benefits offered and coordinated by the internal procedures of MRT Jakarta Co. in the selection, provision, and communication of this value to clients. Value creation is a market proposition provided by MRT Jakarta Co. through products or services that fulfill the demands and wants of customers in the evolving KBT.

The way of expressing real-world situations that are considered problematic, commonly used in SSM, is using rich pictures. Rich Picture (RP) is a tool for depicting as much information as possible related to problem situations in the real world. Horan states that rich pictures are the most common, flexible communication tool in learning. In this research, MRT Jakarta Co. in the Jakarta area has several limitations in creating a TOD area, limited regulation and financing access, and unsupportive infrastructure. Based on the rich pictures show relationships and judgments, search for symbols to convey feelings about the situation, and indicate relationships that are relevant to the solution of the problem situation. SSM places greater emphasis on the results of interviews, discussions, reading literature or documents, and hearing news reports. SSM can be used in a chart showing the parties inter-relationships. The use of images in SSM emphasizes the use of rich pictures.

Compiling a rich picture requires three roles that become references when compiling images [53]. First, the person or group that causes the investigation and implementation of the intervention (client). Second, the person or group carrying out the investigation (practitioner). Third, the issue owner (owner of the issue(s) addressed or issue owner). The issue owner is important because he represents the research investigation and is most interested in its results.

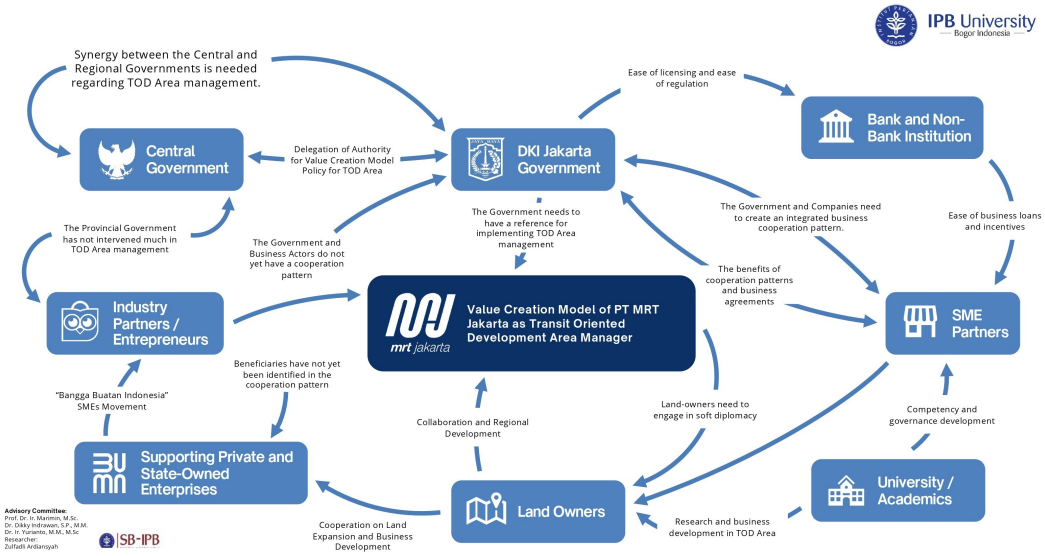

Figure 1. Rich Picture

The rich picture prepared refers to situational analysis based on the results of distributing questionnaires and interviews with experts and business actors. It also refers to the results of Analysis One (Intervention Analysis), Analysis Two (Social Analysis), and Analysis Three (Political Analysis). From the description above, we can describe the rich picture of this research in Figure 1.

A rich picture is a visual aid that shows how intricate a system is and how its components interact in a particular setting. In this instance, value generation for MRT Jakarta Co. will be examined and illustrated within the framework of TOD using the Rich Picture model. The different parts involved, the connections between them, and the opportunities and problems will all be illustrated with the aid of this model. A useful tool for comprehending and illustrating the intricacy of value generation for MRT Jakarta Co. in the development of KBT is the Rich Picture model. MRT Jakarta Co. can more effectively develop and execute strategies that support sustainability goals and enhance community quality of life by mapping stakeholders, value creation drivers, processes, problems, and opportunities. Various stakeholders can be reached using this visual method,

which guarantees that everyone is aware of the goal and the actions required to make the KBT project a success. A diagram containing the aforementioned components and showing the connections between different parts using lines and arrows is an example of a rich picture. These are a rich picture primary components.

- Stakeholders: MRT Jakarta Co. is the provider of transportation services, Local Government is in charge of regulations and planning, Community consists of people who use transportation services and have expectations and wants, Private developers fund building initiatives near the station, Financial Institutions contribute money to BRT initiatives.
- Elements of Value Creation: Integrated Planning refers to MRT Jakarta Co. and the government working together to develop a thorough plan, while community engagement ensures participation in the planning process to address their needs, Sustainability involves eco-friendly building techniques that improve the area appeal, Technology innovation applies intelligent technology to enhance operational effectiveness and user experience.
- Workflows and Processes: Planning and Design involves creating the KBT plan while incorporating feedback from multiple stakeholders, Building stations, railroads, and other auxiliary facilities are examples of infrastructure development, Operations and Maintenance ensure the upkeep of current infrastructure and provide high-quality transportation services, Assessment and Modification involve regularly assessing the effectiveness and influence of KBT.
- Difficulties Financing: Financing refers to the financial limitations for KBT development initiatives, Policy Changes involve uncertainties in regulations that may affect the project, Social Challenges encompass the various community demands and expectations that must be met, Public Spaces and Traffic Congestion highlight the need to resolve traffic congestion in crowded cities.
- Public-Private Partnerships focus on working with the private sector to increase investment and development, Sustainability Initiatives aim to improve MRT Jakarta Co. reputation as an eco-friendly business, Technology Innovation enhances user experience and operational efficiency, Economic Development promotes economic expansion around transit hubs.

4.5. Discussion

The Rich Picture in Figure 1 explains the general overview of the formulating business ecosystem for MRT Co. in creating the TOD area. MRT Jakarta Co., developers, government, associations, and landowners are the main actors who play an essential role in increasing MRT Jakarta Co. ease of business. Business actors must accelerate the regulation by improving flexibility and competence, changing old business ways, and honing collaboration skills. The central or regional government can strengthen regulations by facilitating licensing, providing channels, providing facilities and infrastructure, and monitoring business development. To increase the TOD area, the regional government and the central government prepare programs that suit the needs of MRT Jakarta Co. to improve access to creating TOD Development.

Changes on the external side are influenced by actors whose role is to increase access and collaboration through regulation. Support from local governments and developer associations influences market expansion and business execution. It is hoped that MRT Jakarta Co. will gain the ability to develop and survive if they receive encouragement and management skills from a financial perspective. Apart from the actors who play an essential role in strengthening the TOD area development, some factors and processes influence it. These actors, factors, processes, and spirits are interconnected and form a more dynamic business ecosystem.

This study also reflects the principles of the Sustainable Development Goals (SDGs), especially Goal 11 (Sustainable Cities and Communities) and Goal 9 (Industry, Innovation, and Infrastructure). By promoting the use of public transportation, optimizing land use around transit stations, and fostering inclusive stakeholder collaboration, the TOD development model initiated by MRT Jakarta Co. contributes to building a resilient and sustainable urban environment. The integration of infrastructure, innovation in planning, and economic stimulation around transportation hubs aligns with global targets for sustainable and inclusive urban development [54]. These findings can guide further efforts in ensuring that TOD initiatives are not only economically viable but also socially and environmentally responsible [55].

Regional Connectivity in TOD needs to be done because this refers to how a TOD project links a local area to the larger transportation network creating seamless, efficient movement of people and goods. The key

aspects are multimodal integration Connecting buses, trains, bike lanes, and pedestrian pathways. Reduced travel time by placing residential, commercial, and recreational areas near transit hubs, commuting becomes faster and more convenient. Economic growth by enhanced accessibility can attract businesses, stimulate local economies, and encourage regional investment. And, environmental impact: Fewer cars on the road reduce congestion and carbon emissions. For example a TOD near a major railway station can serve as a gateway, linking suburban communities to urban job centers.

5. MANAGERIAL IMPLICATIONS

The proposed corrective actions on the strategic planning system in the continuously evolving urban development landscape, KBT has emerged as an important strategy aimed at promoting sustainable urban growth while enhancing the public transportation system. This concept focuses on creating communities that maximize access to public transportation, thereby reducing dependence on private vehicles, promoting environmental sustainability, and improving the quality of life for urban residents. In Indonesia, particularly in Jakarta, the mass rapid transit system is a significant investment in public transportation infrastructure. However, to truly harness the potential of this system, it is crucial for MRT Jakarta Co. to adopt an effective value creation strategy that aligns with KBT principles. This paper argues that MRT Jakarta Co. must implement certain improvements to its value creation framework to successfully integrate KBT into its operational and strategic planning. Value creation is very important for every organization, especially in the context of public transportation systems like MRT Jakarta Co. This not only includes financial performance but also considers social and environmental impacts. By implementing a value creation strategy focused on KBT, MRT Jakarta Co. can enhance its service offerings while also making a positive contribution to urban development. This strategy should aim to create value for various stakeholders, including passengers, local businesses, and the wider community. By improving access to public transportation and encouraging high-density and mixed-use development around transit stations, MRT Jakarta Co. can stimulate economic growth and increase passenger numbers.

The success of implementing transit-oriented development through a strong value creation strategy is very important for MRT Jakarta Co. By enhancing collaboration with local governments, engaging communities, integrating smart technology, prioritizing sustainability, and launching effective marketing campaigns, MRT Jakarta Co. can create a transportation system that not only meets the current needs of passengers but also contributes to the sustainability of Jakarta as a livable city. The proposed improvements are not just operational changes; they represent a transformative approach to urban mobility that aligns with global trends towards sustainable, efficient, and community-oriented urban development. As MRT Jakarta Co. embarks on this journey, the potential to reshape the urban landscape and enhance the quality of life for residents and visitors is highly significant.

6. CONCLUSION

Changes in MRT Jakarta Co. business processes encourage a robust and harmonious Transit Oriented Area Development ecosystem. These changes strengthen the layers and hierarchies of regulations, policies, and policies related to implementing TOD and management that can be applied practically, effectively, and with value in the field. Task divisions and unit tasks are distinct and do not overlap. Unit-moving leadership that works together. Fostering positive working ties between corporations and decision-makers/bureaucrats.

The value generated for regional development in accordance with TOD principles, including mixed design, high development density, reliable and optimal connectivity, improved quality of life, social justice and inclusiveness, hunger, infrastructure resilience, and economic revitalization for regions and cities. The definition of value creation in the management of MRT Jakarta Co. is to increase the attractiveness of investors, especially in the property sector in transit-based area development. In summary, a value proposition is a brief statement about the benefits, both intangible and tangible, provided by MRT Jakarta Co. through an internal selection process, provision and communication to clients. Value creation is MRT Jakarta Co. market proposal, which is expressed through products or services that fulfill the desires and aspirations of customers in the developing KBT.

Future research can use comparisons of MRT Jakarta Co. with different regions and geographies. A structured and cohesive framework for the MRT Jakarta Co. Business Model Canvas is called a model that invites business. The value generated for regional development in accordance with KBT principles, including mixed design, high development density, reliable and optimal connectivity, improved quality of life, social justice and inclusiveness, hunger, infrastructure resilience, and economic revitalization for regions and cities. The definition of value creation in the management of MRT Jakarta Co. is to increase the attractiveness of investors, especially in the property sector in transit-based area development. In summary, a value proposition is a brief statement about the benefits, both intangible and tangible, provided by MRT Jakarta Co. through an internal selection process, provision and communication to clients. Value creation is MRT Jakarta Co. market proposal, which is expressed through products or services that fulfill the desires and aspirations of customers in the developing KBT. Future research can use comparisons of MRT Jakarta Co. with different regions and geographies.

7. DECLARATIONS

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The authors declare that they have no conflicts of interest, known competing financial interests, or personal relationships that could have influenced the work reported in this paper.

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